To: Deschambault, Lynda[Deschambault.Lynda@epa.gov]

Cc: Barton, Dana[Barton.Dana@epa.gov]; Greg Reller

(gr@burlesonconsulting.com)[gr@burlesonconsulting.com];

'anthony.brown@bp.com'[anthony.brown@bp.com];

marc.lombardi@amecfw.com[marc.lombardi@amecfw.com];

Cory.S.Koger@usace.army.mil[Cory.S.Koger@usace.army.mil]; Chang, Kay

SPK[Kay.Chang@usace.army.mil]; Carey, Douglas@Waterboards[douglas.carey@waterboards.ca.gov];

Pool, Catherine@Waterboards[Catherine.Pool@waterboards.ca.gov]; Stetler,

Chris@Waterboards[Chris.Stetler@waterboards.ca.gov]

From: Ferguson, Scott@Waterboards
Sent: Thur 8/24/2017 11:22:28 PM

Subject: Leviathan Mine-Pond 3 Capacity Update

Lynda,

Beginning today, the Water Board's contractor began pulling sludge from the perimeter of Pond 3 up onto the lined portion of Pond 3's berms, as described in the email, below. It is anticipated that this action will allow the sludge to dewater more quickly, making it available sooner for transport. As the sludge dries and is transported offsite, the process will be repeated.

Water Board staff will notify USEPA and Atlantic Richfield via email when staff anticipates being able to transport Pond 3 sludge offsite. Staff will also notify the parties regarding how much sludge was transported.

Please let me know if you have any questions or comments regarding this matter.

Scott C. Ferguson, P.E.

Supervising Water Resource Control Engineer

Scott.Ferguson@waterboards.ca.gov

(530) 542-5432

From: Ferguson, Scott@Waterboards [mailto:scott.ferguson@waterboards.ca.gov]

Sent: Monday, August 07, 2017 5:42 PM

To: Deschambault, Lynda < Deschambault. Lynda @epa.gov >

Cc: Greg Reller <gr@burlesonconsulting.com>; Cory Koger <<u>Cory.S.Koger@usace.army.mil</u>>;

Chang, Kay SPK < Kay. Chang@usace.army.mil >; Carey, Douglas@Waterboards

< douglas.carey@waterboards.ca.gov>; Stetler, Chris@Waterboards

<<u>Chris.Stetler@waterboards.ca.gov</u>>; Pool, Catherine@Waterboards

<<u>Catherine.Pool@waterboards.ca.gov</u>>

Subject: Leviathan Mine-Pond 3 Capacity

Lynda,

As you are aware, Pond 3's capacity is currently very limited due to the sludge produced in Pond 3 during this year's Emergency Spring Treatment Operations. Lahontan Regional Water Quality Control Board (Water Board) staff has considered a number of options for restoring Pond 3's capacity in preparation for the upcoming wet-weather season. There are options that involve modifying Pond 3's structure (e.g., increase pond berm height; install weir board system; etc.); however, such options are very complex and would require extensive geotechnical analysis and engineering design work to maintain the pond's integrity, and avoid increasing environmental risks and risk to other site infrastructure. There are also options that involve spreading the sludge to enhance drying; however, again, such options are complex in nature, requiring extensive planning/analysis, design, and construction activities in order to mitigate the risk of discharging hazardous waste at the site and to nearby surface waters. There is not enough time for such preparatory analysis, design, and construction/implementation work to occur and safely implement either of these types of options before the onset of the upcoming wet-weather season.

Water Board staff has identified one option that staff believes will enhance the sludge drying process; does not require extensive planning/analysis, design, and/or construction work; and minimizes increases in environmental risks and risks to existing infrastructure. This option involves having the Water Board's contractor pull sludge from the perimeter of Pond 3 up onto the lined portions of Pond 3's berms (still within the confines of Pond 3). It is anticipated that placing the sludge on the berm will allow the sludge to dewater and dry more quickly, making it available sooner for transport. This process would be repeated; each time, reaching further out into the pond to pull sludge back onto the berm.

Please let me know if you have any questions or comments regarding Water Board staff's recommended approach.

Scott C. Ferguson, P.E.

Supervising Water Resource Control Engineer

Scott.Ferguson@waterboards.ca.gov

(530) 542-5432